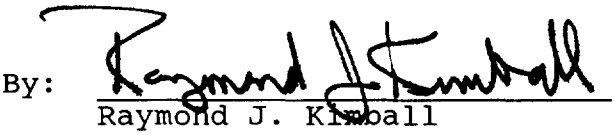
will continue to hurt the SMR markets through inadequate proposals.

Respectfully submitted,
SMR WON, INC.

By: 
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Dated: March 1, 1995

EXHIBIT 1

January 30, 1995
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JPMorgan

Company Update

NEXTEL Communications, Inc.

All of the Stars Must Align

Market Performer

Despite the precipitous drop in Nextel's stock, we do not recommend purchase. Nextel's stock has declined about 60% since the MCI transaction was called off in early September and recently traded below $10. The company's bonds have performed similarly and now yield nearly 20%, or more than 1,000 basis points over Treasurys. The most frequently asked question about Nextel these days is, "When does it get to be a BUY?" Some investors believe the market has gone from over-hyping the company to unduly punishing it.

We remain cautious on the stock, because the company faces several major hurdles, all of which it must overcome to realize its nationwide cellular business plan. The hurdles as we see them are as follows:

1. Completing the spectrum acquisitions
2. "Fixing" the technology
3. Plugging near-term and longer-term funding gaps
4. Developing marketing and distribution for the mass market (cellular)
5. Building out the near-nationwide network by the end of calendar 1996

Our model suggests that the much-discussed $800 million near-term financing need is just the beginning. We project Nextel will require an additional $1 billion by March 1999 and nearly $2 billion on top of that by March 2001. Thus, even if Nextel manages all of the business issues successfully, it faces substantial financing hurdles. While 1999 is a long way off, a 10-year discounted cash flow model has no meaning unless the underlying business can raise the capital needed to realize those cash flows.

On a pure spectrum basis, we estimate Nextel is worth $5 per pop (not enough to cover the debt)

Our new cellular-case valuation for the stock is $12 as of March 1995. If Nextel should remain primarily a dispatch company as a result of technology or other issues, we estimate the stock is worth $8 (lower revenues, lower capex, lower discount rate). In both cases, we assume that the Motorola/OneComm/Dial Page deals get done and give Nextel credit for increasing its dispatch subscriber base by a factor of 6 by 2005.

Investors and analysts probably should not get too caught up in valuation models, as Nextel trades largely on news events and psychology. Over the next 12 months, we believe there is as much potential for bad news as for good news and that it is unlikely the stock will outperform the market enough to compensate investors for the risk. Thus, we retain our MARKET PERFORMER rating.

Common Stock (NASDAQ: CALL)

			EPS	P/E		
Price (1/27/95)	$10.50	3/94A	($0.73)	N/M	S&P 500	470.39
52-Wk Range	$47-10	3/95E	($2.80)	N/M	Market Cap.	$1,109 MM
Dividend	Nil	3/96E	($3.99)	N/M	Shares Outstanding	105.6 MM
Yield	N/M	3/97E	($4.06)	N/M	Fully Diluted/Pending	256.1 MM
		3/98E	($4.34)	N/M	Avg. Daily Volume	1,680,000

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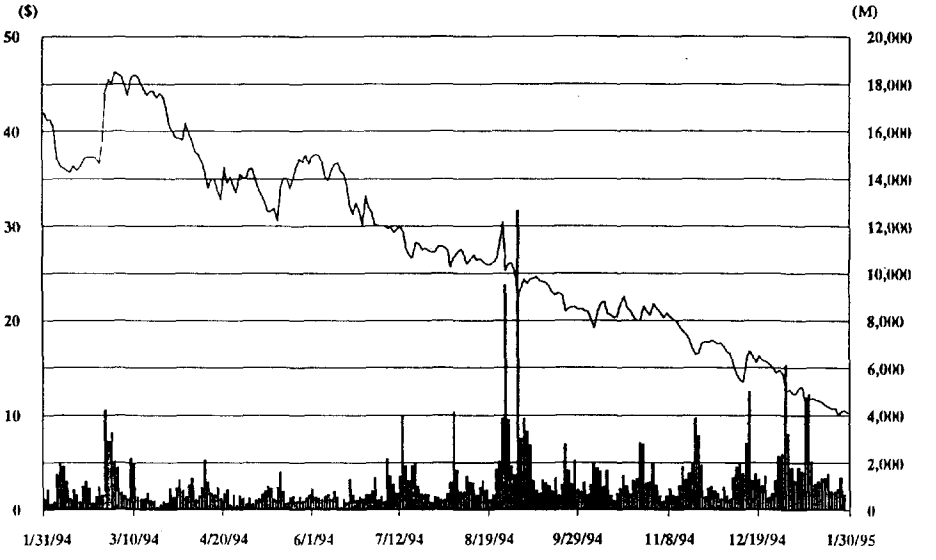
MAJOR HURDLES TO JUMP

The performance of Nextel's stock over the past year reflects a shift in investors' focus away from Nextel's long-term potential and toward the obstacles the company must overcome to realize that potential. The delay and subsequent loss of the MCI deal was the catalyst for this shift, but the stock has continued to drift south even after the market repriced the stock for the collapse of the MCI/Motorola/Nextel discussions. Investors' confidence has been shaken by continuing technology and funding problems, leading to speculation that Nextel may remain primarily a dispatch player, rather than becoming the third cellular carrier.

Chart 1: Nextel's Stock Is Off 78% From Its Peak in March 1994



Nextel faces several key hurdles that it must get over or around if it is to realize its nationwide cellular business plan. In the short term, the company needs some good news on one or more of these issues to lift its stock out of the doldrums. Over the longer term, it must successfully address all of these issues to provide shareholders with the whole value of the nationwide cellular business plan. The hurdles as we see them are as follows:

We feel fairly comfortable that Nextel can address the acquisition and physical build-out hurdles, but the solutions to the other obstacles are not clear

1. Completing the spectrum acquisitions
2. "Fixing" the technology
3. Plugging the near-term and longer-term funding gaps
4. Developing marketing and distribution for the mass market (cellular)
5. Building out the near-nationwide network by the end of calendar 1996

Acquisitions: The Latest Hurdle

Nextel alerted the market earlier this month that it must find a way to reduce its debt to total capital ratio to complete its acquisitions of OneComm and Dial Page and its

purchase of Motorola's 800 MHz SMR channels. All three transactions are structured as mergers (partially for tax reasons), and the indentures for the Nextel, OneComm, and Dial Page public notes require that the surviving entity of a merger have a maximum debt to total capital ratio of less than 30%. Assuming a Nextel stock price of $11.00 and the completion of all three mergers, we estimate that Nextel's debt to total cap ratio would be over 45%. Thus, the company would have to dramatically decrease debt, increase equity (at the current stock price) or engineer an equity-for-debt swap to meet the test. The problem would go away if Nextel's stock price increased to $21-22, but this appears very unlikely by the time the company wants to close the deals (within the next three months or so).

We believe Nextel is likely to seek bondholder approval of the deals, in return for an amendment fee of some kind. Although some bondholders are unhappy with Nextel for a variety of reasons, we believe the acquisitions are in the bondholders' best interests and that Nextel would get the approval. Assuming Nextel pays a fee of approximately 3% on the accreted value of all three companies' bonds, this would cost about $50 million, a small number in the larger scheme of things. (See "Motorola/OneComm/Dial Page Acquisitions Hit a Snag," beginning on page 14 for further details.)

Technology: The Most Imponderable Hurdle

Nextel is still struggling with its technology, nearly 18 months after completing initial construction of its Los Angeles system (August 1993). Although dispatch voice quality is good, both Nextel and Motorola admit that the cellular voice quality needs to improve. We recently used a Nextel phone for several days in the New York area. While we found the network reliability to be solid (no problems getting "dial tone" and no dropped calls in three days), the voice quality sounded very mechanical. In our view, Nextel's voice quality still lags U.S. digital cellular, which itself significantly lags analog cellular. Digital cellular probably claims fewer than half a million of the 23-24 million cellular subscribers in the United States as of year-end 1994, in part because it sounds "digital." We believe analog cellular quality is the more appropriate target for Nextel, since the company ultimately wants to compete in the mass market. Based on conversations with Motorola and Nextel, we believe there is room for improvement, but it's difficult to project whether Nextel's voice quality will approach the level of analog cellular. (See "What's Going On With the Technology?," beginning on page 16 for further details.)

Funding: Short-Term and Long-Term Hurdles

Nextel says it will require an additional $800 million of funding around the end of 1995 to complete the initial build-out of its nationwide network through the end of fiscal 1997 (March 1997). In our view, Nextel is far from being in imminent danger of bankruptcy, as some have suggested. Based on conversations with management, we believe the company will slow down its build-out in the second or third calendar quarter of 1995 if a relatively certain source of the $800 million short-fall has not been identified.

The best solution to this problem, in our opinion, would be an equity investment by a strategic (or even financial) partner. This would help with the debt/total cap ratio problem under the public notes (probably not enough to completely solve that problem) and put Nextel in a much better position for later borrowing needs. At Nextel's current stock price, $800 million of equity would add 70-80 million new shares to the existing 256 million fully diluted shares (assuming completion of all acquisitions). But this dilution would probably be offset substantially by the collective sigh of relief from existing Nextel investors and the fierce covering of short positions (currently amounting to about 12 million of the 106 million shares outstanding). Most of the likely strategic suspects have already settled their wireless strategies (see more below), but it is possible that some strategic or financial

player will look at Nextel's $10-11 stock price and conclude that Nextel is a cheap way to get into the nationwide market quickly.

The most likely non-equity solution, in our view, is additional vendor financing. The public debt market does not appear to be a viable alternative at this point, as Nextel's existing public notes are currently trading at a yield of nearly 20%. Nextel is talking with banks, but we suspect banks will view Nextel as equity risk. Motorola knows better than anyone else (including Nextel) how well the MIRS technology will ultimately work and is in the best position to assess Nextel's potential. Motorola will own about 25% of Nextel and has already agreed to provide $685 million of vendor financing, two financial commitments that will be threatened if the $800 million gap is not filled. On the other hand, Motorola has never been an aggressive provider of vendor financing and may already have hit its exposure limit. Our reading of Nextel's indenture suggests that the company can take on about $600 million of additional debt financing, so some of the $800 million gap would have to be structured as something other than straight debt (e.g., preferred stock).

Is it too soon to think about funding needs beyond 1997?

Our financial model suggests that Nextel will have substantial additional capital requirements after the immediate $800 million. The $800 million need will take Nextel through March 1997, but we project an additional $1 billion requirement by March 1999 and nearly $2 billion on top of that by March 2001. We assume for modeling purposes that these needs will be met with additional debt, but that is a tall order. The additional capital requirements are generated by a combination of factors. Operating cash flow (EBITDA) first turns positive in 2000, also the first year in which all of the Nextel/OneComm/Dial Page public notes become cash-paying. In the year ending March 2000, for example, we project operating cash flow of $217 million, to cover $710 million of cash interest and $400 million of capital expenditures. Perhaps it is too early to worry about funding needs in 2001, but we cannot place too much reliance on a 10-year discounted cash flow model without feeling comfortable that the company will be able to raise the capital suggested by the model.

Marketing/Distribution: A Hurdle for 1997

Nextel's focus over the next two years will be on dispatch users, which the company will pursue primarily through a direct salesforce. Once the network is built out, Nextel will pursue the mainstream cellular market, and it will need a much deeper marketing and distribution effort. We continue to believe that the company needs a strong partner to compete against existing cellular carriers and the new PCS players (there is a large overlap between the cellular and PCS camps, so the PCS players will not be starting their marketing/distribution efforts from scratch). However, we are not optimistic about a new partner, mostly because the large telecom players appear to have settled their wireless strategies. AT&T closed the McCaw acquisition and is bidding aggressively at the broadband PCS auctions. Sprint formed an alliance with major cable companies and is also bidding aggressively at the PCS auctions. The RBOCs have either formed alliances to offer nationwide cellular/PCS services (AirTouch/U S WEST/Bell Atlantic/Nynex) or elected to stick close to their existing regional knitting (BellSouth, Southwestern Bell).

MCI, perhaps still the most likely Nextel partner candidate, says it believes wireless network capacity will be plentiful once PCS arrives. Instead of owning a wireless network, MCI plans to resell others' capacity. This may be the best economic solution for MCI, although it would probably prefer to control its own network if the price were not prohibitive. Still, we believe MCI is unlikely to come back to Nextel. Although we still do not know for sure why MCI broke off discussions with Nextel and Motorola, there is a reasonable chance that technology played into the decision. If MCI's vision is that wireless will become a replacement for wireline later in the decade and that wireless voice quality must be equivalent to wireline, then Nextel clearly cannot deliver (neither can any other radio

technology today). If MCI remains a wireless reseller, with no investment in a network, the company can migrate in the future to whatever radio technology offers the best voice quality. We also suspect that relations between MCI and Motorola were seriously poisoned during the past rounds of negotiations, and this may prevent a revival of the MCI/Nextel deal.

Build-Out: Day-to-Day Blocking and Tackling

Nextel's cellular business plan depends on getting its network built out nationwide as soon as possible. Until the company has a large national footprint, it is unlikely to be able to win a significant share of the cellular-only (i.e., not dispatch-related) market. The company's goal is to have the top 50 markets in the United States built out by the end of calendar 1995 and most of the rest of the nationwide network done by the end of calendar 1996. Thus far, Nextel is offering service in California (Los Angeles, San Francisco, and the Central Valley between Los Angeles and San Francisco), New York, and Chicago. OneComm is offering service in Denver, Seattle, and Portland and is testing systems in Kansas City, Wichita, Oklahoma City, Tulsa, and St. Louis. Building a national network is a daunting task, and Nextel's target of completing most of the system by the end of 1996 is ambitious.

Nextel has tackled the largest and most difficult markets first, and it managed to get the New York and Chicago systems up and running on time (by the end of 1994). Given its technology and backlog problems in Los Angeles, Nextel has become somewhat more cautious about trumpeting its build-out progress. Although the company has told the investment community on conference calls that the New York and Chicago systems are commercial and already have several hundred paying customers, it has made no formal announcement.

VALUATION: CELLULAR OR DISPATCH?

We caution against attributing too much precision to a 10-year DCF valuation

As Nextel's stock price has spiraled downward, investors have increasingly been looking for a way to get comfortable with a floor value. The two most-often suggested downside valuation scenarios are the value of Nextel if it remains primarily a dispatch company and the value of the radio spectrum alone.

Our revised discounted cash flow model suggests a value of $12 for the stock assuming a reasonable "cellular" scenario and $8 assuming a "dispatch-only" scenario. The assumptions behind our cash flows for the two scenarios are identical (see *Financial Model*, beginning on page 21), except as shown in Table 1 below. In both cases, we assume that the Motorola/OneComm/Dial Page deals get done.

Our dispatch-only valuation assumes that Nextel expands its dispatch subscriber base from 800,000 units today to 5 million in 2005

Table 1: Cellular vs. Dispatch-Only Model Assumptions

Assumption	Cellular/ Dispatch	Dispatch Only
Digital Dispatch Subscribers in 2005 (MM)	5.0	5.0
Percent of Dispatch Subscribers That Also Use Cellular	50%	50%
Cellular-Only Subscribers in 2005 (MM)	5.6	0
Total Cellular Subscribers in 2005 (MM)	7.8	2.5
Capital Expenditures Per Year After 1998 (SMM)	$400	$100

Source: JPMS estimates.

Compared with dispatch, the cellular portion of Nextel's business plan faces more hurdles, and some of the hurdles may be fatal if they cannot be overcome. If Nextel

should remain primarily a dispatch company, some of the hurdles become less important or even irrelevant. For example, we believe Nextel's technology already offers superior service for dispatch and therefore do not consider technology to be a risk in a dispatch-only scenario. Similarly, our marketing/distribution concerns apply to the cellular mass market, not the dispatch market. A large portion of the dispatch business is done through direct sales, and given the lack of high-quality competition, we expect that Nextel will be able to penetrate the indirect distribution channel for dispatch relatively quickly.

Since a "dispatch-only" case incorporates less uncertainty, we believe it is appropriate to adjust for risk in the discount rate. With Nextel's bonds trading at a yield of nearly 20%, this puts a floor on our equity discount rate. We use a 20% discount rate for the dispatch-only case and a 25% discount rate for the cellular case. Table 2 below summarizes our view of the importance of the various risks Nextel faces in the two scenarios.

Table 2: Cellular vs. Dispatch Risk

Hurdles	Cellular/ Dispatch	Dispatch Only
Acquisitions	X	x
Technology	X	
Funding	X	x
Marketing	X	
Build-out	x	x
Equity Discount Rate	25%	20%
DCF Value Per Share	$12.43	$8.03

Note: Large X denotes a crucial factor; small x denotes an important but less crucial factor. DCF = discounted cash flow. DCF values per share are as of March 1995 and assume a 20% trading discount to private market value.
Source: JPMS estimates.

The cellular upside is substantial

If our cellular case pans out, the upside in Nextel's stock is considerable. Our cellular-case model values Nextel at over $12 as of March 1995 (Nextel's fiscal year end). Inherent in our 25% equity discount rate is 25% appreciation potential over the 12 months to March 1996 ($15.50). This would suggest 48% upside from today's price.

We would characterize our dispatch-only case as a "reasonable" case, not a "worst" case. The reason is that we assume that Nextel will be able to expand its dispatch subscriber base by a factor of more than 6 over the next 10 years. We believe this is achievable, but it is not a slam dunk. Assuming all of the acquisitions close, Nextel will have about 44% of the SMR dispatch market. Given the superior quality of Nextel's digital dispatch service, we assume that the company will increase its market share by 2 percentage points per year, to reach 62% in 2005. Also, we assume that Nextel will take 1% per year of the private mobile radio market. (See "What Does the Dispatch Opportunity Look Like?," beginning on page 11.)

What Is Nextel's Spectrum Worth?

We believe that comparisons of Nextel's spectrum value to the prices paid for narrowband PCS licenses, on a per MHz-pop basis, are inappropriate. We grant that the PCS auctions provide the first good proxy for the value of pure radio spectrum, as past cellular discounted cash flow valuations and private market transactions have blended together spectrum, subscribers, network equipment, cost structure, and so forth.

Narrowband PCS licenses sold on average for $3.21 per MHz-pop. Scaled up

proportionately for the amount of spectrum in question, these prices would imply for Nextel the following: $32 per pop, a firm value of $8 billion, and a stock price of $31.

Table 3: Spectrum Valuation Comparison

Scenarios	Price Per MHz Pop	Implied Nextel Value Per Pop	Implied Nextel Firm Value ($MM)	Implied Nextel Share Price
Narrowband Auction	$3.21	$32.10	$8,025	$31.06
Broadband Auction (As of 1/27/95)	$0.31	$3.10	$775	($2.96)
Assuming Broadband Auction of $15 Billion	$0.50	$5.00	$1,250	($0.73)
80% Broadband/20% Narrowband	$0.89	$8.90	$2,225	$3.85
Implied 60.4% Broadband/39.6% Narrowband	$1.46	$14.57	$3,643	$10.50

Note: Assumes that all acquisitions close and that Nextel will own an average of 10 MHz of radio spectrum, covering 250 million pops. Assumes net debt of $1,405 million as of 3/31/95 and 213.1 million shares outstanding (includes Motorola, OneComm, and Dial Page acquisition shares, but no options). "Broadband Auction of $15 Billion" assumes that each of the 30 MHz PCS licenses sells for approximately $15 per pop on average across the nation (about 50% higher than the current bidding).

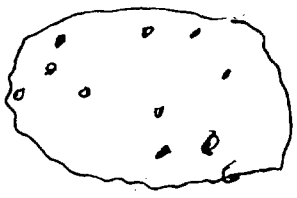
We do not believe that scaling up *narrowband PCS* spectrum prices to estimate Nextel's spectrum value makes sense. Using the same logic, each of the two 30 MHz broadband licenses currently being auctioned would be worth $96 per pop (on average, across the entire country), implying $24 billion for a nationwide license (each 30 MHz license covers about three times as much spectrum as Nextel has). We believe $20 per pop is an optimistic value for each of the 30 MHz PCS licenses currently being auctioned; this would imply a total of about $10 billion for the two 30 MHz licenses on a nationwide basis and a similar amount for the remainder of the broadband PCS licenses to be auctioned later this year. In this case, all broadband PCS licenses combined would go for $20 billion, about double the figure targeted in the Federal budget. Current bidding in the broadband auction is just below $10 per pop, with several companies already having bid a total of over $1 billion; an ultimate price of $20 per pop appears possible but far from certain.

In our view, the broadband PCS auctions will put a ceiling on the value of Nextel's spectrum. PCS and SMR spectrum are not strictly comparable. Nextel's spectrum does have better radio propagation characteristics (the same as cellular) than PCS; a PCS signal requires about four times as much energy to reach the same distance as an SMR signal. Practically speaking, this means PCS requires more base stations to cover the same area. On the other hand, a 30 MHz PCS license covers three times as much spectrum and is contiguous. (See "What's Going On With the Technology?," beginning on page 16, for more on the latter.)

Backing into a value for Nextel's spectrum is a very subjective task. If we assume a) that the 30 MHz PCS licenses go for $15 per pop (50% higher than the current bidding), b) that the PCS propagation disadvantage is offset by the Nextel non-contiguous disadvantage, and c) that Nextel's value per pop should be one-third of PCS to account for its smaller amount of spectrum, then we **end up at $5 per pop.** This is not enough to cover Nextel's debt.

Our simplified spectrum valuation ignores a variety of other factors. For example, Nextel and OneComm are already offering commercial service in half a dozen markets and are well along in building out a number of others. This may give Nextel's spectrum some "time value" advantage over PCS spectrum. Also, Nextel's spectrum may be worth some premium, as it is a nationwide footprint, controlled by a single carrier. **Even if our spectrum valuation is too conservative by a factor of 2 or 3 times, however, this translates into $10-15 per pop, or a stock price of only $4-9 per share.**

Break-Up Valuation



We are frequently asked about the break-up value of Nextel. Since any break-up valuation depends in part on the value of the spectrum, it is another highly subjective exercise. Table 4 below summarizes our estimates of break-up value as of March 1996 (after the acquisitions have closed) under various scenarios. We divide the value into three pieces:

- **Radio spectrum:** Discussed above.
- **Digital network equipment:** Nextel is running two networks at this point: the old analog SMR network and the new MIRS (digital) network. The analog equipment can be valued as part of the analog SMR business, but the digital equipment would probably have some separate salvage value (for example, the switches are based on GSM and could probably be reconfigured for use in a GSM network). We assume the equipment is worth 25-75% of Nextel's cumulative capital expenditures through March 1996.
- **Analog SMR business:** Nextel's existing SMR business generates solid cash flow and could be sold as a going concern. Since the analog business requires spectrum to operate, there is some redundancy in ascribing value to both the raw radio spectrum and the analog SMR business, and we do not attempt to resolve this issue. Assuming all of the acquisitions close, Nextel will have about 800,000 subscribers, paying $20 per month for their analog dispatch service. Historically, this business has operated at 50-60% operating cash flow margins. Assuming that the business dynamics do not change substantially, this is about a $100 million per year operating cash flow business. Putting multiples of 5 to 10 times operating cash flow on the business implies a value of between $500 million and $1 billion.

Table 4: Possible Nextel Break-Up Valuation at March 1996

Components of Value	Method	Low Value	Mid Value	High Value
Radio Spectrum	Pops x per pop value			
Pops (MM)		250	250	250
Assumed Value Per Pop		$5.00	$5.00	$7.50
Radio Spectrum Value ($MM)		$1,250	$1,250	$1,875
Digital Network Equipment	Cumulative capex x salvage value			
Cumulative Capex ($MM)		$1,800	$1,800	$1,800
Assumed Salvage Value		25%	50%	75%
Digital Network Equipment Value ($MM)		$450	$900	$1,350
Existing Analog SMR Business	800,000 SMR subscribers x $20/month x 12 months x 50% operating cash flow margin x operating cash flow multiple			
Operating Cash Flow ($MM)		$96	$96	$96
Assumed Cash Flow Multiple		5.0x	7.5x	10.0x
Existing Analog SMR Value ($MM)		$480	$720	$960
Total Value (Firm Value)		$2,180	$2,870	$4,185
Less: Net Debt at March 1996		$2,541	$2,541	$2,541
Equity Value		($361)	$329	$1,644
Shares (MM)		213.1	213.1	213.1
Value Per Share		($1.69)	$1.54	$7.71

Source: JPMS estimates.

Is Nextel a Cellular Company or a Dispatch Company?

Wireless investors are increasingly asking themselves whether Nextel will become a mainstream cellular company with a smaller dispatch business on the side, or the reverse. The reasons: Nextel continues to have difficulty with its technology, and management's recent presentations to the investment community have increasingly focused on the company's potential in the dispatch market. While Nextel has always positioned itself as primarily a dispatch company in the near term, investors generally look at Nextel as a cellular play over the medium- to long-term.

If Nextel's ultimate business potential lies in dispatch rather than cellular, this will have two implications: 1) less excitement about the story in the investment community and 2) different valuation parameters. Cellular service is familiar to investors and appeals to a relatively broad segment of the population; growth prospects appear excellent. On the other hand, investors' exposure to the dispatch business has been mainly as an adjunct to the cellular stories of Nextel, OneComm, and Dial Page, giving dispatch less pizzazz and raising more questions. At a minimum, the growth prospects of dispatch are less certain.

Nextel's pursuit of the mainstream cellular market appears to be delayed about a year from our earlier expectations; the question is whether it is just a delay. At a minimum, Nextel is giving up some of its time-to-market advantage over PCS, and this may impact its longer-term cellular market share. There are also questions, however, as to whether the Nextel/Motorola technology will ultimately offer the quality of service necessary to compete with cellular and PCS. If not, Nextel is likely to remain primarily a dispatch company. **Further, if Nextel is unable to close its near-term $800 million funding gap, the company's nationwide cellular business plan will be in jeopardy.**

Dispatch Was and Is the Phase I Strategy ...

Nextel planned from the very beginning to concentrate initially on dispatch and only later to broaden its marketing efforts to potential cellular-only users. Specifically, the company planned to target initially its existing analog dispatch customers, other SMR operators' customers, some private mobile radio customers, and business users with a strong need for integrated dispatch, cellular, paging, and data. This strategy was born out of necessity: while the cellular market is very attractive in terms of total market potential and average monthly bill, Nextel cannot compete initially with existing cellular carriers. Nextel lacks: 1) a large footprint, enabling roaming for cellular customers, 2) a small, cellular-like handset, and 3) thoroughly debugged technology. Each of these issues is less critical for a dispatch user than a cellular user.

... But How Soon Will Nextel Be Ready for the Cellular-Only Market?

Our thinking until recently was that Nextel would be ready to pursue the cellular-only market by early 1996, with each of the three "cellular disadvantage" issues addressed by the end of 1995:

- **Debugged Technology:** Nextel and Motorola continue to struggle with Motorola's MIRS (Motorola Integrated Radio System) technology, but a year-end 1995 target for going after cellular-only customers would provide another 12 months of debugging time.

- **Smaller Handset:** Nextel's current MIRS handset weighs about 16 ounces versus about 8 ounces for the typical portable cellular handset. Motorola has promised Nextel a

smaller, lighter (about 8 ounces) MIRS handset for second quarter 1995 (calendar), although Nextel suggests that this may slip to the third quarter.

- **Large footprint:** Nextel expects to have the top 50 markets in service by the end of 1995 and most of the rest of the nation by the end of 1996. While a 50-market footprint is not strictly competitive with the two existing cellular networks (which are already nationwide), it would cover the largest business travel markets and would probably give Nextel the ability to address cellular-only customers. Nextel and OneComm are offering commercial service thus far in California (Los Angeles, San Francisco, and the Central Valley between San Francisco and Los Angeles), New York, Chicago, Denver, Seattle, and Portland.

Nextel's management has indicated recently that 1997 is a more realistic timeframe for pursuing the cellular-only market. We suspect this relatively cautious guidance derives in large part from Nextel's lack of confidence in the technology. The company cannot afford to sully its name further by putting customers on a poorly performing network. Nextel may prefer to build out the vast majority of the network and work through the bugs with its dispatch customers, who are likely to be less exacting than cellular customers.

Timing Issue or More Fundamental Issue?

Major PCS operators are likely to enter the market by 1997, so Nextel has lost the time-to-market advantage. The initial broadband PCS auctions are expected to conclude in February 1995. Even assuming that it takes most of 1995 to finalize equipment standards and produce equipment in commercial quantities, this gives PCS operators 12 months before Nextel begins pitching to cellular-only customers. This is not enough time for a nationwide PCS network to be built, but some of the larger markets could conceivably get built that quickly. PCS is being pursued by multiple very capable carriers, such as AT&T/McCaw, AirTouch/U S WEST/Bell Atlantic/Nynex, the Sprint/cable alliance, GTE, and Pacific Telesis. Even allowing for technology or other delays in PCS, these carriers collectively are likely to catch up with Nextel in terms of network build-out relatively quickly.

The larger issue is whether the MIRS technology will ever offer good enough voice quality for Nextel to compete with cellular (and PCS). If not, Nextel will remain primarily a dispatch company by default. Handicapping the ultimate potential for the MIRS technology at this point is difficult. (See "What's Going On With the Technology?," beginning on page 16.)

WHAT DOES THE DISPATCH OPPORTUNITY LOOK LIKE?

Perhaps the most important factor differentiating the cellular and dispatch business opportunities is market size. We expect cellular-type (some combination of cellular, PCS, and ESMR) penetration in the United States to exceed 40% ten years from now, suggesting a market of well over 100 million users. The key to reaching this level is penetration of the consumer segment, which is already happening in big numbers. Dispatch, on the other hand, appeals almost exclusively to businesses because dispatch is typically used as a broadcast from one person to many. **Ultimately, dispatch penetration should be considerably lower than cellular, and a dispatch business plan means no mass market.**

Nextel's nationwide footprint is a key differentiator in the cellular market, but its importance will be considerably diluted if Nextel remains a dispatch-focused carrier. The vast majority of the business is local or regional. In a dispatch-focused scenario,

Nextel's nationwide footprint provides the company with access to the largest possible customer base and may provide some economies of scale, but the importance of seamless roaming and consistent features across the entire network become less important.

The dispatch business model differs from cellular in several other key ways:

- **Lower average monthly bill:** Cellular subscribers pay $60-70 per month on average across the U.S. versus $15 per month for analog dispatch. Dispatch users who are also interconnected to the public switched telephone network (in cellular-like fashion) generate considerably higher average bills of about $52 per month, but still well below the combination of $15 of dispatch plus $60 of cellular. Nextel is charging $25 per month for digital dispatch service in Los Angeles and $35 in New York, but it is too early to assess whether the market will bear these higher rates.

- **Lower incremental capital expenditures:** After the initial network build-out, cellular carriers currently spend as much as $1,000 per incremental subscriber to maintain sufficient network capacity. Dispatch subscribers require less capacity, so incremental network expenditures should be lower.

- **System sale vs. "one-sies and two-sies":** Whereas cellular is sold widely through retail channels one or two units at a time, dispatch is sold as a system. The customer is likely to purchase multiple handsets, and some setup effort is required, such as establishing talk groups (subsets of users that want to be able to communicate as a group simultaneously) and integrating the system into the way the customer does business. Dispatch requires a direct salesforce.

Dispatch Is More Than SMR

The "dispatch" market is not limited to the current base of specialized mobile radio (SMR) users. It also includes the much larger private mobile radio market, also referred to as two-way radio or land mobile radio; in total, we estimate the existing dispatch user base at about 20 million units.

Table 5: Dispatch Market Size

Category	Number of Users (MM)
SMR Subscribers	2
PMR Public Safety Users	3
PMR Other Users	15
Total	20

Note: SMR = specialized mobile radio. PMR = private mobile radio.
Source: American Mobile Telecommunications Association (SMR subscribers) and JPMS estimates.

SMR is carrier-based, meaning that subscribers purchase a handset and then pay a monthly charge for using the service. Private mobile radio (PMR) is not carrier-based; the end-user's company owns not only the handset, but also the transmission towers and the radio spectrum. Thus, a company using PMR owns and operates its entire system.

The total dispatch market is growing relatively slowly compared to cellular. PMR was one of the earliest radio applications, and the market is relatively well-penetrated. Even SMR systems have been around since the 1970s. U.S. cellular subscribers have grown 40-50% annually over the past four years; during the same time, SMR subscribers grew 14%

per year (but 18% in 1994). Motorola says the PMR market has grown less than 10% per annum for the past few years.

Nextel is likely to be able to convert some portion of the non-Nextel SMR users and the non-public safety PMR users over to the company's digital network. Analog SMR systems are generally overcrowded, resulting in blocked calls (when all channels are busy) and poor voice quality. SMR interconnect services to the public switched telephone network are particularly poor. Public safety PMR users are probably not available to Nextel, as their radio communications systems are more than "mission-critical"; they are often a matter of life and death. Public safety users like to control their own radio systems, and it is unlikely that they will move to a carrier-based service.

There Are Good Reasons for PMR Users to Move Over to Nextel ...

Nextel is likely to be able to penetrate some of the non-public safety PMR user base. Nextel points to the following advantages of its system over PMR:

- **Wider coverage area:** Some of Nextel's digital SMR customers who were formerly using analog SMR systems have been able to expand their businesses geographically by switching to Nextel's digital service. Presumably, the same would apply to some PMR users.

- **Other integrated services:** Dispatch users tend to be heavy users of other wireless communications services, such as paging and telephone interconnect. Nextel offers a well-integrated menu of services.

- **Better voice quality:** Digital technology is just making its way into the PMR market, and many of the older analog PMR systems sound "scratchy," like analog SMR.

- **Reduced congestion:** Switching to Nextel should eliminate blocked calls.

- **Privacy:** Analog PMR systems are easy for anyone to listen in on (witness police scanners). Although Nextel's system does not include encryption, the fact that it is digital makes it more difficult for outsiders to pick up and decode.

- **Eliminate maintenance costs:** PMR users who move over to Nextel can eliminate the overhead of running their own systems. We suspect such overhead is minor.

... But Nextel Requires an Ongoing Financial Commitment

The primary obstacle to converting PMR users over to Nextel's service is that many customers' PMR systems are paid for. Although PMR users may incur some network maintenance and administrative costs for running their systems, many of the systems are old and the capital investment was fully depreciated years ago. Switching over to Nextel requires a commitment to pay Nextel $20-30 per user per month into perpetuity. If a business can significantly expand its service area because the Nextel system provides coverage out to more distant areas, the business may be willing to commit to higher monthly communications costs. But unless the existing PMR system significantly impedes its users from getting business done, features such as better voice quality may not be a compelling reason to switch.

Nextel Is Not the Only Carrier-Based Dispatch Player

In addition to the numerous small analog SMR carriers, Nextel will compete in the dispatch market with Geotek. Geotek's business plan is focused exclusively on dispatch in about 35 major metropolitan areas, concentrated on the East Coast. Geotek is developing its own radio technology and expects to be able to build out its network at very low cost per pop. The company is implementing its first system in Philadelphia and expects to go commercial in the second half of 1995. While it is too early to assess the prospects of Geotek's technology and the company is behind Nextel in terms of network build-out, we cannot assume that Nextel will be the only high-quality dispatch network available.

MOTOROLA/ONECOMM/DIAL PAGE ACQUISITIONS HIT A SNAG

Although Nextel faces a significant new obstacle in its efforts to close the Motorola, OneComm, and Dial Page spectrum acquisitions, we still believe the transactions will get done. The latest obstacle came to light when Nextel and OneComm filed 8-K's on January 10 noting that they will be unable to close their deal without either reducing the debt to total capitalization ratio of the combined entity or getting approval from both companies' bondholders. This became an issue as Nextel's stock price fell below $20. **This limitation will also apply to the Motorola and Dial Page deals.**

The Motorola, OneComm, and Dial Page deals are all structured as mergers, in large part to avoid immediate tax consequences for the sellers. (The Motorola merger entity is a subsidiary of Motorola.) The indentures for the Nextel, OneComm, and Dial Page public notes contain a substantially identical provision to the effect that the issuer cannot enter into a merger unless the combined entity would be able to incur at least one additional dollar of debt under the debt incurrence covenant. This covenant allows the issuer to incur additional debt only if the ratio of debt to total capitalization (debt plus equity market cap) is less than 30%. (There is an alternative cash flow-based test, but it is too early for Nextel to be generating much cash flow.)

Nextel's debt to total capitalization ratio is about 53%, assuming a stock price of $11. The combined Nextel/Motorola entity would have a lower debt/total cap ratio of about 42%, since the deal involves nearly 60 million Nextel shares and no assumed debt. Both OneComm and Dial Page involve assumed debt and would increase the ratio.

This problem can be addressed in several ways:

- Reduce debt,
- Increase equity through issuance of additional Nextel shares,
- Increase equity through a higher Nextel stock price,
- Some combination of the above (e.g., equity for debt exchange),
- Get bondholder consent for the transactions.

We calculate that Nextel's stock price would have to be in the $21-22 range to make this problem go away quietly for all three transactions. Alternatively, with Nextel's stock in its current $11 range, the combined entity (all four companies) would have to reduce debt by $950 million of accreted value (the Nextel, OneComm, and Dial Page public notes are zero

coupon). With the Nextel and OneComm notes trading at about 50% of accreted value, it would take far less than $950 million in cash to reduce debt by that much, but Nextel is already funding-constrained and cannot afford to use several hundred million dollars of cash for this purpose. Finally, with no changes in debt outstanding or Nextel's stock price, Nextel would have to issue 202 million additional shares of stock to meet the debt/total cap test in the absence of any other action. In Table 6 below, we calculate the combined Nextel debt/total cap ratio under various scenarios and estimate the amount of debt Nextel would have to reduce or equity it would have to raise to meet the test. All of the calculations assume a Nextel stock price of $11.

The Appendix provides scenarios for a range of Nextel stock prices

Table 6: Calculation of Nextel Combined Debt/Total Cap Ratio

	Nextel Only	Nextel + Motorola	Nextel + Motorola + OneComm + Dial Page
Nextel 0/11.5% Notes Due 2003 ($MM)	$350	$350	$350
Nextel 0/9.75% Notes Due 2004 ($MM)	$760	$760	$760
Nextel Other Debt ($MM)	$206	$206	$206
OneComm 0/10.125% Notes Due 2004 ($MM)			$273
OneComm Other Debt ($MM)			$6
Dial Page 0/12.25% Notes Due 2004 ($MM)			$326
Dial Page 0/10.25% Notes Due 2005 ($MM)			$77
Other Dial Page Debt ($MM)			$94
Less: Dial Page Paging Debt ($MM)			($135)
Total Debt ($MM)	$1,316	$1,316	$1,956
Nextel Shares Outstanding (MM)	105.6	105.6	105.6
Shares to be Issued to Motorola (MM)		59.5	59.5
Shares to be Issued to OneComm (MM)			20.0
Shares to be Issued to Dial Page (MM)			28.0
Total Nextel Shares	105.6	165.1	213.1
Nextel Share Price Required to Reach 30% Target Ratio (20 day average trading price)		$18.60	$21.42
Assumed Average Closing Price of Nextel Stock (past 20 trading days) ($)	$11.00	$11.00	$11.00
Combined Nextel Market Cap ($MM)	$1,162	$1,816	$2,344
Actual Debt/(Debt + Market Cap) Ratio	53.1%	42.0%	45.5%
Additional Shares Required to Reach 30% Target Ratio (MM)		114.1	201.9
% Dilution of Ownership		35%	44%
Reduction in Debt Required to Reach 30% Target Ratio ($MM)		$538	$952
% of Total Debt Outstanding		41%	49%

Note: Nextel, OneComm, and Dial Page zero-coupon notes at estimated accreted value as of 3/31/95; all other debt figures as of 9/30/94.

We believe the most likely solution is bondholder consent. The "reduce debt" and "increase shares" options require relatively heavy levels of both. It is likely to take another 2-3 months to get the various approvals required to complete the transactions, and Nextel's stock price will probably move around quite a bit in the meantime. Getting bondholder consent for the transactions would remove the stock price-induced uncertainty. Although an equity for debt exchange offer to bondholders is possible, we believe it's unlikely for several reasons: a) Bondholders who believe in the upside of the Nextel story can look forward to a 20% yield to maturity on their existing paper, with downside protection; it may take a significant sweetener to get them to switch to equity. b) An equity/debt exchange offer would attract a lot of attention in the equity market and the resulting dilution might take the stock down, offsetting some of the benefit. c) An equity/debt exchange offer is relatively

complicated, giving the bondholders a much broader range of issues to consider, compared with a simple consent solicitation. Nextel needs to solve this issue quickly and move on.

Bondholder consent is not a slam dunk, but it should be doable. Nextel/OneComm/Dial Page bondholders are not a happy group these days, as the bonds are trading at about 50% of accreted value. Nextel's difficulties have rattled bond investors, taking the yield on the notes to the 20% level. Some of OneComm's bondholders are particularly unhappy. The indentures provide that upon a change of control, the issuer must offer to buy back the bonds from bondholders at a price equal to 101% of the accreted value. OneComm bonds were trading at about 54 in July, prior to the announcement of the Nextel/OneComm deal; a quick run up to 101% of accreted value would have taken the bonds to 65, for a 20% gain. Some of the OneComm bondholders thus expected to be taken out at a quick profit upon the announcement of the deal. But the deal is structured as a ***merger***, rather than an ***acquisition***. Nextel and OneComm maintain that there is no change of control of OneComm and that no bonds can be put back to Nextel/OneComm. This has been the source of some consternation among bondholders.

Bondholders are likely to be better off with the Motorola/OneComm/Dial Page deals than without. The combined story is stronger and easier to tell than the separate ones, and this is likely to be reflected in the stock and bond prices over the long term. Although the bondholders may be tempted to stick it to Nextel by insisting on a huge cash payment in return for their consent, Nextel can ill afford such a payment. Two wireless companies have recently offered their bondholders a fee in return for amending their indentures. Dial Page paid its paging bondholders 2.5% of face value for permission to sell the paging business (as part of the deal with Nextel). Paging Network, the largest paging operator in the country, recently asked its bondholders to loosen its debt covenants and paid a fee of 3% of face value. Nextel/OneComm/Dial Page might have to pay somewhat more than that, given the circumstances, but a fee of 3% of accreted value would cost only about $50 million.

Finally, if the deals do not happen, what are the implications for Nextel? The loss of the Motorola deal would be a disaster, but we are somewhat less concerned about the OneComm and Dial Page deals. Motorola's channels represent a significant increase in both footprint and capacity for Nextel, and management has always said that Motorola is its most important deal (more important even than MCI). In our view, Nextel must find some way to get the Motorola deal done. OneComm and Dial Page's markets are important in terms of filling in Nextel's footprint in the Midwest, Pacific Northwest, and South, but probably little would be lost in the grand scheme of things if Nextel, OneComm, and Dial Page reverted to their previous plan to have a roaming agreement. Dial Page and OneComm might have somewhat more difficulty raising financing on their own than together with Nextel, but debt financing looks difficult for all three companies currently (Motorola vendor financing may be the answer).

WHAT'S GOING ON WITH THE TECHNOLOGY?

Both Nextel and Motorola admit that the technology is taking longer to stabilize than they originally expected. Nextel President Brian McCauley said on an investor conference call recently that Nextel is about nine months behind on network deployment, largely due to technology glitches. New radio technology is notoriously difficult to move from the well-controlled lab environment to the real world (with its varying topography, man-made obstacles, interfering radio signals, etc.), and Nextel and Motorola are rediscovering that fact.

Live Testing in New York

Based on our use of New York system for a few days in mid January, we believe Nextel's system is improving. We used several hours of interconnect (cellular) airtime over a 3-day period in a variety of locations in the New York area (downtown and midtown Manhattan, New Jersey, and southern Westchester County) and in a variety of situations (in-building, on the street, in cars, and on an Amtrak train bound for Philadelphia). We used a portable handset, which has lower transmit power than a permanently installed mobile; and should bring out the worst in the system. The "network" aspects of the system worked very well. Gaining access to the network was no problem, and our calls went through promptly. We never had a dropped call, even through several 20-30 minute conversations while driving from downtown Manhattan to Westchester County (which we suspect generated multiple call handoffs as we moved from cell to cell).

The Nextel/Motorola MIRS voice quality still lags analog and digital cellular in our view. The voice quality is clearly "digital" in character, and the clarity is not as good as analog. We were able to have natural conversations, but had to work a little harder to understand everything that was said (as did the landline side of the conversations). On a few conversations, there was an audio delay similar to the way an overseas long distance call sounds when it is routed through a satellite. We experienced relatively few "digital artifacts" or anomalies such as "warbles." Overall, we thought the New York system sounded more solid than Los Angeles (which we heard in July 1994) and Denver (September 1994), but voice quality needs to improve further to be strictly competitive with analog cellular.

Both MIRS and digital cellular (TDMA) sound significantly different from analog cellular. To our ear, the digital technologies make voices sound "mechanical" or "robotic." At its best, an analog call sounds very clear, whereas the digital technologies remove some of the individual character and clarity of the voice. When the radio channel is not at its best due to inadequate coverage, interference, or other anomalies, analog becomes static-ridden, but digital produces "artifacts," such as warbles or short drop-outs in the conversation. Most cellular users are accustomed to some static, but warbles take some getting used to. Cellular One's (LIN Broadcasting) New York digital cellular system started up in the summer 1994 and sounded very poor for the first few months. The system has improved recently, but it still sounds different (we think worse) than analog. Nextel's MIRS voice quality currently lags digital cellular.

MIRS Is Nextel's Only Choice for Now

Why is Nextel's technology so important in the first place? There are plenty of other wireless technologies, such as AMPS (analog), TDMA, CDMA, GSM, and so forth. MIRS appeals to Nextel for several reasons:

- **High Capacity:** MIRS is designed to provide a substantial capacity boost over analog (6 times), TDMA (2 times), and GSM (around 4 times).

- **Multi-Functionality:** MIRS incorporates not only cellular, but also dispatch, paging, and data capability. MIRS is the only "cellular" technology that handles dispatch, which will be the core of Nextel's business for at least the next few years.

- **Robustness:** Perhaps most importantly, MIRS works well in non-contiguous radio spectrum (which CDMA cannot).

Nextel does not have the luxury, as cellular and upcoming PCS providers will have, of using contiguous spectrum. Contiguous spectrum allows simpler system design, because it

can be assumed that all channels in a certain range of the spectrum band are to be used solely by a single carrier, using a single technology. Nextel's SMR spectrum was originally licensed by the FCC in small chunks; while Nextel has assembled a large amount of spectrum, there are other users intermingled throughout its spectrum. Many of the other users are using old equipment, which may send stray radio signals into Nextel's channels, creating a "hostile environment." MIRS incorporates additional overhead to keep track of Nextel's channel position and to guard against interference from other users; no other technology is designed to do this. **Unless Nextel can concentrate its channels at one end of the SMR spectrum band and move other users to the other end, the company has no technology option other than MIRS from Motorola.**

Wide Area Licensing and Mandatory Retuning

The FCC is proposing to license all currently unlicensed SMR spectrum on a geographic basis, much as PCS is licensed. This would not affect existing SMR licenses, but it would make it easier for the owner of the geographic license to expand. If the FCC adopts this strategy, it would auction off four licenses of 2.5 MHz each in 51 geographic areas of the United States. Since much of the SMR spectrum has already been granted to SMR operators (including Nextel) under the existing licensing rules, the auctioned licenses probably would be relatively inexpensive.

As part of the wide area licensing proceeding, Nextel wants the FCC to establish a contiguous band of SMR channels for large SMR operators and to require smaller operators to retune their equipment and move to another part of the SMR band, eliminating the "non-contiguous" problem. This would give Nextel more technology flexibility, eliminate many interference problems, and enhance Nextel's ability to compete with cellular. However, it would also make Nextel, the behemoth of the SMR world, even more powerful compared to the typical small SMR operator, perhaps reducing competition in the SMR market. Nextel is asking the FCC to require other SMR operators to retune every single customer's handset, as well as their network equipment, to accommodate Nextel's cellular ambitions. Nextel has clearly been very effective to date in getting the FCC approvals required to pursue its business plan, but this latest request looks like a tall one to us. Politically, the FCC has the choice of making one big company unhappy or many little companies unhappy. Nextel's chances are clearly better than zero, but we suspect they are less than 50/50.

Down to the Bits and Bytes

Motorola and Nextel chart the progress of the MIRS technology primarily in terms of three measures:

- Network reliability (downtime)
- System accessibility (ability to get a channel)
- Voice quality

Network reliability needs to improve further to meet cellular standards, but we believe that this goal will be met soon. This is mostly an issue of integrating a large, new telecommunications system. Nextel states that the Los Angeles system is presently at a 99.875% reliability level, so assuming that there are approximately 150 cell sites in Los Angeles and 30 days in a month, then that implies that 5.5 cell sites go down for one day each month. The calculation for network reliability is: 1 - (non-working cell site days/total cell site days). Motorola expects the "blue load" of infrastructure software (rolling our from

December 1994 through the first quarter 1995) to take the reliability to 99.90%, and the goal later in 1995 is to reach the cellular standard of 99.95% +.

Table 7: Nextel Network Reliability

System	Reliability Level	Downtime
Los Angeles - End of 1994	99.85-99.88%	0.12-0.15%
Blue Load of Infrastructure Software	99.90%	0.10%
Cellular Industry Standard (Goal)	99.95% +	0.05%

Source: Nextel and Motorola.

System accessibility is a measure of the subscriber's ability to get a channel, both when he wants to initiate a call and when his call is handed off to a new cell site (if no channel is available, the call is dropped). The Denver and San Francisco systems had some early accessibility problems that Motorola traced to a combination of too few radios in some cell sites and software glitches that prevented a channel from being released and becoming available once a call was ended. Los Angeles continues to have some of these problems, but Motorola expects to address them soon.

Voice Quality Is the Key Issue

Voice quality is probably the most complex of the MIRS technology problems and the most difficult to improve. First, it is useful to understand why Nextel's cellular voice quality is perceived as "needing improvement" while the dispatch voice quality is more than adequate. We believe there are a number of reasons:

- Most dispatch calls use the loudspeaker, rather than the earpiece, so noises in the dispatch user's environment mask some of the voice quality.
- Dispatch calls are shorter and therefore less likely to encounter an anomaly.
- Dispatch is one-way only, so the user is only listening about half the time. With cellular, the user can also listen while he is talking. Also, audio delay (the overseas long distance effect) is not relevant for dispatch, since only one party can talk at a time (no "uh huhs" to acknowledge what the other person is saying).
- Dispatch and cellular are held to different standards. Nextel's dispatch quality is such a significant upgrade over existing analog SMR or PMR that few would complain about the dispatch voice quality.

To address cellular voice quality issues, Motorola conducted an experiment in December 1994 with a group of Nextel employees and customers. The participants were asked to make MIRS cellular calls while driving around town. Motorola recorded the calls and made various other measurements during the calls. Then, each caller was asked to sit in a conference room and listen to a recording of his calls, identifying anything in the calls that he considered to be a "defect." Finally, Motorola went back through the bit stream and other measurements and tried to determine what caused each defect.

The primary symptoms identified as defects were "mutes" (dropped syllables or words), audio delay, and various "digital artifacts" such as "warbles." Motorola traced most of the mutes back to relatively slow handoffs between cells, which it believes can be addressed through improvements in the infrastructure software (likely during summer 1995). Audio delay will be addressed in the "brown load" of infrastructure software through faster digital processing, likely in the second quarter 1995. The various digital artifacts were traced back

to a variety of issues, but they can be summarized as the need to get "more signal on the street." In order to improve the strength of the radio signals, Nextel may need to improve coverage by building out more cell sites.

Motorola has also made a few other improvements to the handset software as a result of users' suggestions, including reduced side-tone (the volume level of the user's voice that is fed back to his own earpiece) and a better user interface (e.g., the handset beeps to let you know when the other person has released the "talk" button in dispatch mode, so that you do not have to say "over" constantly).

Motorola has said from the beginning that it would deliver to Nextel a system with quality equal to U.S. digital cellular (i.e., not analog cellular). As noted above, both digital cellular and MIRS have a mechanical or robotic sound to our ears, but it appears that the users in the Motorola experiment did not complain about this. Most of Motorola's efforts appear to be directed at removing anomalies that show up under hostile conditions. The exception is that Motorola has adjusted the "voice shaping" to make the sound of MIRS "more pleasing" (by amplifying some frequencies more than others). We have heard the latest version of the handset software that incorporates this change, and the digital character remains.

The MIRS technology provides a substantial increase in capacity over other commercially available technologies and may have sacrificed voice quality to get there. MIRS uses about 4,000 bits per second (bps) to characterize the human voice, compared to U.S. digital cellular (TDMA) at 8,000 bps and GSM at 13,000 bps. All three technologies are similar in terms of their basic air interface architecture. If all other factors are equal, this means that MIRS should provide 2-3 times more capacity. If the MIRS algorithm for converting the analog voice to digital is also "2-3 times more efficient," this would suggest equal voice quality. Since MIRS was developed several years after the other two, it probably is more efficient but perhaps not by a factor of 2 or 3. Table 8 below summarizes the various digital radio technologies and their capacity and bit rate.

Table 8: Digital Radio Technology Comparison

Radio Technology	Capacity vs. Analog Cellular	Bit Rate
MIRS	6 x	4.2 Kbps
U.S. Digital Cellular (TDMA)	3 x	7.8 Kbps
CDMA	6-20 x	8 or 13 Kbps
GSM	1.5 x	13 Kbps
FHMA - Geotek	27 x	5 Kbps

Note: Kbps = kilobits per second or thousands of bits per second.
Source: JPMS estimates.

The key question for Nextel is not how good the quality is in an absolute sense, but rather how good does the quality need to be for the niche to which Nextel will market its services? "Acceptable" voice quality means different things for different situations. While a user may demand very high quality while using a landline phone, the same user will most likely demand a lower level of quality if something else can be gained from the ability to be mobile. In Nextel's case, one question is whether the benefits of an integrated cellular, dispatch and short-messaging unit outweigh the voice quality differential vs. cellular. **When compared to dispatch alternatives, Nextel voice quality is not only adequate, but superior.** Dispatch users may decide that the utility of being able to use their "dispatch" handset for "cellular" calls outweighs somewhat worse-than-cellular voice quality. On the other hand, consumer cellular-like users may decide that they need higher quality because their voice quality comparison is usually to a familiar voice over a high quality landline phone.

FINANCIAL MODEL

Our model assumes that all of the acquisitions (Motorola, OneComm, and Dial Page) close at the end of fiscal 1995 (March 1995). Thus, the 1995 income statement reflects Nextel operating on its own for the whole year, but the balance sheet at March 1995 includes the acquisitions. Our new cellular case valuation reflects our caution on the long-term outlook for Nextel and suggests a $12 price for the stock.

The revised model incorporates the following changes:

- **Discount Rate Increased:** Our old equity discount rate was 18%, a slight premium to the rate we use for established cellular carriers (15%). With Nextel's bonds now trading at a yield of nearly 20%, this puts a floor on the equity discount rate. Given the significant hurdles the company faces (acquisitions, technology, funding, marketing, and build-out) and its cost of debt, we believe a 25% equity discount rate is appropriate.

- **Cellular Subscribers Reduced:** In our previous model, we were looking for 60,000 cellular subscribers by the end of fiscal 1995 (March 1995) and over 200,000 a year later, based on our assumption that Nextel would begin to pursue the cellular-only market in calendar 1996. These subscriber levels look far too optimistic at this point, given that Nextel had only 15,000 digital subscribers at the end of calendar 1994, of whom about 25% were signed up for cellular. Management has recently indicated that it does not expect to go after cellular-only customers before 1997. Based on this later start and our caution regarding Nextel's voice quality, we have reduced our Nextel cellular subscriber estimates from 16-19% of industry net adds previously to 11-12% now. This has roughly the effect of moving our old estimates off by one year, until

- **Dispatch Subscribers Nearly Quadrupled:** Our old dispatch subscriber estimate for 2005 was 1.4 million, or only about double the company's existing customer base (assuming all of the announced acquisitions close). We expect that Nextel will be able to increase its market share of the SMR market by about 2% per year, from 44% now to 62% by 2005. We also assume that Nextel will be able to take 1% per year of the PMR market (or what would have been the PMR market in the absence of Nextel). Finally, we assume that 10% of cellular-originated users will also use dispatch services. According to our projections, Nextel will be able to achieve this growth in dispatch subscribers purely through taking a major share of the net adds to the market, without reducing the absolute number of non-Nextel subscribers.

- **Dispatch Revenues Split Between Digital and Analog:** Previously, we made no distinction between analog and digital dispatch users. Since Nextel plans to charge a premium for digital service, we have broken out the two categories and put different average monthly revenue assumptions on each.

- **Interest Rate on Future Debt Financing Increased:** Nextel's bonds currently trade at a nearly 20% yield. We assume that the company's yields will improve before it issues new debt, but we have increased our "necessary to finance" interest rate assumption from 11% to 15%.

- **Capital Expenditures Reduced Slightly:** Our lower cellular subscriber estimate should require somewhat lower capital expenditures, so we have reduced our estimate of capital expenditures after the initial build-out, from $500 million per year to $400 million per year.

Table 9: Subscriber Projections

	1994A	1995E	1996E	1997E	1998E	1999E	2000E	2001E	2002E	2003E	2004E	2005E
Cellular Subscribers (M)												
Beginning Subscribers		0	8	75	252	605	1,223	2,179	3,401	4,620	5,792	6,861
Net Adds		8	67	177	353	618	955	1,223	1,218	1,172	1,070	969
% of Industry Net Adds		0.1%	0.7%	2.0%	3.9%	6.9%	10.6%	12.2%	12.2%	11.7%	11.3%	10.8%
% Growth			752.6%	165.7%	98.9%	75.2%	54.5%	28.0%	(0.4%)	(3.8%)	(8.8%)	(9.4%)
Ending Subscribers		8	75	252	605	1,223	2,179	3,401	4,620	5,792	6,861	7,830
% Growth			852.6%	237.8%	140.0%	102.2%	78.1%	56.1%	35.8%	25.4%	18.5%	14.1%
POPS (MM)		94	200	255	258	260	263	265	268	271	273	276
Penetration		0.01%	0.04%	0.10%	0.23%	0.47%	0.83%	1.28%	1.72%	2.14%	2.51%	2.84%
Dispatch Subscribers (M)												
SMR Market												
Nextel Subscribers	203	800	871	957	1,073	1,202	1,344	1,500	1,672	1,862	2,071	2,300
Incremental Marketshare Gain	0.0%	0.0%	0.6%	1.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
% of Market	0.0%	44.4%	45.0%	46.0%	48.0%	50.0%	52.0%	54.0%	56.0%	58.0%	60.0%	62.0%
% Growth	0.0%	0.0%	8.8%	9.9%	12.2%	12.0%	11.8%	11.6%	11.5%	11.3%	11.2%	11.1%
Other	0	1,000	1,064	1,123	1,163	1,202	1,240	1,278	1,314	1,348	1,380	1,410
% of Market	0.0%	55.6%	55.0%	54.0%	52.0%	50.0%	48.0%	46.0%	44.0%	42.0%	40.0%	38.0%
% Growth	0.0%	0.0%	6.4%	5.5%	3.5%	3.4%	3.2%	3.0%	2.8%	2.6%	2.4%	2.1%
Total	1,525	1,800	1,935	2,080	2,236	2,404	2,584	2,778	2,986	3,210	3,451	3,710
% Growth	13.0%	18.0%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%
Private Mobile Radio (Ex. Public Safety)												
Nextel Subscribers		0	39	124	304	501	718	955	1,214	1,496	1,803	2,138
Incremental Marketshare Gain		0.0%	0.3%	0.5%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
% of Market		0.0%	0.3%	0.8%	1.8%	2.8%	3.8%	4.8%	5.8%	6.8%	7.8%	8.8%
% Growth		0.0%	#DIV/0!	215.0%	145.0%	65.0%	43.2%	33.0%	27.1%	23.3%	20.6%	18.5%
Other		15,000	15,711	16,413	17,060	17,731	18,426	19,147	19,893	20,666	21,467	22,295
% of Market		100.0%	99.8%	99.3%	98.3%	97.3%	96.3%	95.3%	94.3%	93.3%	92.3%	91.3%
% Growth		0.0%	4.7%	4.5%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%
Total		15,000	15,750	16,538	17,364	18,233	19,144	20,101	21,107	22,162	23,270	24,433
% Growth		0.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Nextel Dispatch Subscribers												
SMR Market	203	800	871	957	1,073	1,202	1,344	1,500	1,672	1,862	2,071	2,300
% of Dispatch Subs.	100.0%	100.0%	95.6%	88.1%	77.1%	68.3%	61.3%	55.9%	52.1%	49.4%	47.4%	46.0%
Private Mobile Radio Market	0	0	39	124	304	501	718	955	1,214	1,496	1,803	2,138
% of Dispatch Subs.	0.0%	0.0%	4.3%	11.4%	21.8%	28.5%	32.8%	35.6%	37.8%	39.7%	41.3%	42.8%
Cellular Originated Users of Dispatch	0	0	1	5	16	56	129	226	322	411	492	561
% of Cellular Users	0.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%
% of Dispatch Subs.	0.0%	0.0%	0.1%	0.5%	1.1%	3.2%	5.9%	8.4%	10.0%	10.9%	11.3%	11.2%
Other Dispatch	0	0	0	0	0	0	0	0	0	0	0	0
% of Dispatch Subs.	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Nextel Dispatch Subscribers	203	800	911	1,086	1,393	1,759	2,190	2,681	3,208	3,769	4,366	4,999
% Growth	0.0%	0.0%	13.8%	19.3%	28.2%	26.3%	24.5%	22.4%	19.6%	17.5%	15.8%	14.5%
Nextel Dispatch (Analog/Digital)												
Analog	203	779	679	579	479	379	279	179	79	0	0	0
Digital	0	0	0	0	0	0	0	0	0	0	0	0
Digital Net New Adds	0	15	110	175	307	367	431	491	526	562	597	633
Digital Conversion	0	6	100	100	100	100	100	100	100	79	0	0
Digital Net Adds	0	21	210	275	407	467	531	591	626	641	597	633
Digital	0	21	231	507	913	1,380	1,911	2,502	3,128	3,769	4,366	4,999
Total Dispatch Subscribers	203	800	911	1,086	1,393	1,759	2,190	2,681	3,208	3,769	4,366	4,999
Subscriber Usage Summary												
Digital ESMR Cellular	0	8	75	252	605	1,223	2,179	3,401	4,620	5,792	6,861	7,830
Digital Dispatch	0	21	231	507	913	1,380	1,911	2,502	3,128	3,769	4,366	4,999
Digital SMS/Paging	0	0	59	277	527	943	1,535	2,270	3,011	3,735	4,399	5,025
% of Digital Users	0.0%	0.0%	25.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Digital Users												
Cellular Originated	0	4	5	52	156	561	1,288	2,264	3,216	4,113	4,924	5,611
Dispatch Originated	0	21	231	502	898	1,324	1,782	2,276	2,807	3,358	3,874	4,438
Digital Users	0	24	236	553	1,054	1,885	3,070	4,539	6,023	7,471	8,798	10,049
Analog Dispatch	203	779	679	579	479	379	279	179	79	0	0	0

Source: JPMS estimates.

Table 10: Long-Term Earnings Model (1994-2005E)

	1994A	1995E	1996E	1997E	1998E	1999E	2000E	2001E	2002E	2003E	2004E	2005E
Digital Cellular Service Revenues	0	3	28	106	261	524	926	1,473	2,096	2,721	3,307	3,839
Average Digital ESMR Cellular Subs	0	4	41	163	429	914	1,701	2,790	4,010	5,206	6,327	7,346
AMR - Digital ESMR Cellular	$0.00	$60.22	$57.21	$54.07	$50.82	$47.77	$45.37	$44.00	$43.55	$43.55	$43.55	$43.55
Digital Dispatch Service Revenues	0	3	39	120	240	402	601	838	1,111	1,416	1,737	2,080
Average Digital Dispatch Subs	0	11	126	369	710	1,147	1,646	2,206	2,815	3,449	4,068	4,683
AMR - Digital Dispatch	$0.00	$25.00	$26.00	$27.04	$28.12	$29.25	$30.42	$31.63	$32.90	$34.21	$35.58	$37.01
Digital SMS/Paging Service Revenues	0	0	2	10	24	44	74	114	158	202	244	283
Average Digital SMS/Paging Subs	0	0	30	168	402	735	1,239	1,902	2,640	3,373	4,067	4,712
AMR - Digital SMS/Paging	$0.00	$5.00	$5.00	$5.00	$5.00	$5.00	$5.00	$5.00	$5.00	$5.00	$5.00	$5.00
Total Digital Service Revenues	0	6	69	236	525	971	1,601	2,425	3,366	4,339	5,288	6,202
Average Digital Subs	0	12	130	395	804	1,470	2,478	3,804	5,281	6,747	8,135	9,424
AMR - Digital Overall		$40.96	$44.42	$49.80	$54.46	$55.04	$53.85	$53.11	$53.11	$53.59	$54.17	$54.84
Analog Dispatch Service Revenues	45	61	204	183	160	135	108	78	46	15	0	0
Average Analog Subs	172	228	729	629	529	429	329	229	129	40	0	0
AMR - Analog	$21.58	$22.44	$23.34	$24.27	$25.24	$26.25	$27.30	$28.40	$29.53	$30.71	$31.94	$33.22
Equipment & Maintenance Revenues	23	54	153	172	241	342	446	512	491	472	474	485
Total Revenues	68	121	427	592	926	1,448	2,155	3,015	3,903	4,825	5,762	6,687
Cost of Service	12	34	137	178	248	340	446	588	721	828	905	930
% of Service Revenues	26.5%	50.0%	50.0%	42.5%	36.1%	30.7%	26.1%	23.5%	21.1%	19.0%	17.1%	15.0%
Marketing Costs	0	24	141	192	266	391	521	607	616	629	664	713
% of Service Revenues	0.0%	35.0%	51.6%	45.7%	38.8%	35.4%	30.5%	24.2%	18.1%	14.4%	12.6%	11.5%
General & Administrative	29	67	123	160	223	324	450	626	811	983	1,134	1,264
% of Service Revenues	64.4%	100.0%	45.0%	38.3%	32.5%	29.3%	26.3%	25.0%	23.8%	22.6%	21.5%	20.4%
Cost of Equipment	17	49	153	172	254	380	496	569	546	524	527	539
Corporate Expenses	12	14	16	18	20	22	24	26	28	30	32	34
Operating Cash Flow	(2)	(67)	(144)	(129)	(84)	(9)	217	599	1,180	1,831	2,499	3,206
Operating Cash Flow Margin	(4.1%)	(99.2%)	(52.6%)	(30.9%)	(12.3%)	(0.8%)	12.7%	23.9%	34.6%	42.1%	47.3%	51.7%
Depreciation & Amortization	58	142	327	397	447	487	527	562	596	632	653	623
Operating Income	(60)	(208)	(471)	(526)	(531)	(496)	(310)	37	584	1,199	1,846	2,584
Operating Income Margin	(135.3%)	(309.2%)	(172.0%)	(125.6%)	(77.5%)	(44.8%)	(18.1%)	1.5%	17.1%	27.5%	34.9%	41.7%
Gain on Sales	0	0	0	0	0	0	0	0	0	0	0	0
Interest Expense - Cash	(29)	(15)	(47)	(132)	(212)	(355)	(710)	(841)	(909)	(880)	(774)	(520)
Interest Expense - Zero Accretion	0	(113)	(208)	(233)	(260)	(226)	(6)	0	0	0	0	0
Total Interest Expense	(29)	(127)	(255)	(365)	(473)	(581)	(715)	(841)	(909)	(880)	(774)	(520)
Other Income - Net	11	46	27	9	6	7	8	10	10	11	12	14
Income Before Taxes	(78)	(290)	(699)	(882)	(998)	(1,070)	(1,016)	(795)	(315)	330	1,084	2,078
Taxes	(21)	0	0	0	0	0	0	0	0	0	0	0
Net Income	(57)	(290)	(699)	(882)	(998)	(1,070)	(1,016)	(795)	(315)	330	1,084	2,078
EPS	($0.73)	($2.80)	($3.99)	($4.06)	($4.34)	($4.42)	($4.19)	($3.28)	($1.30)	$1.29	$4.23	$8.11
Average Shares (MM)	78.4	103.5	175.2	217.4	229.9	242.4	242.4	242.4	242.4	256.1	256.1	256.1

Source: JPMS estimates.